.30-06 Springfield

Historical Notes United States military cartridge adopted in 1906 for the Model 1903 Springfield service rifle, which was based on the Mauser bolt action system. The .30-06 is actually a slightly modified version of the original 1903 cartridge, which was loaded with a 220-gr. round-nosed bullet at a muzzle velocity of 2300 fps. Because of cartridge developments in Europe it was considered advisable to change to a 150-gr. bullet at an increased velocity of 2700 fps, and at the same time the case neck was shortened by .07-inch. This improved round was designated the "Ball Cartridge, caliber .30,, Model of 1906," but in practice the nomenclature was shortened to .30-06. The .30-06 version can be chambered and fired in any rifle made for the original 1903 round, but the reverse is not always true because of the difference in case length. For many years both the 1903 and 1906 loadings and case configuration were loaded by sporting ammunition manufacturers. Shooting the '06 in the '03 chamber reportedly gave poor accuracy. Old catalogs list both rounds, and occasionally the 1903 version is called the .30-45 because the original loading used 45 grains of smokeless powder.

Again because of military developments in Europe, the army switched to a 172-gr. bullet with a 9° boat-tail in 1926, the new round being designated the "Ball, caliber .30, M1." Muzzle velocity, originally the same as the 150-gr. load on 2700 fps, was later reduced to 2640 because of difficulty in maintaining pressure specifications at the higher velocity. In 1940 the 150-gr. flat-base bullet was re-adopted as the "Cartridge, Ball, caliber .30, M2" and this was the load used in World War II. It is my understanding that the return to the lighter bullet came about, at least in part, because of difficulties in adapting the then new Garand semi-auto rifle to handle the 172-gr. loading. The heavier boat-tail bullet was superior for machine gun use through its greater maximum range (nearly 6000 yards for the original 2700 fps load), compared to about 3500 yards for the 150-gr. loading.

The rimless .30-03 and the later .30-06 replaced the older rimmed .30-40 Krag as the official U.S. military round. The .30-06 has, in its turn, been superseded by the 7.62mm M59, also known as the 7.62mm NATO or, in its commercial version, as the .308 Winchester. As a sporting cartridge the .30-06 is one of the most popular and widely used big game numbers ever developed. In Europe it is known as the 7.62X63mm. Every manufacturer of standard length bolt action sporting rifles in the western world includes the .30-06 as one of the available calibers .

The Winchester Model 1895 lever action appears to have been the first sporting rifle chambered for the then new .30-03. The cartridge was added to the line of available calibers in 1904-1905, the modified 1906 round in 1908. The Remington bolt action Model 30, introduced in 1921, and the Winchester bolt action Model 54 brought out in 1925 both offered the 30-06, among other calibers. The Savage bolt action Model 40 and 45 Super-Sporter rifles were also so chambered when introduced in 1928. At present, in addition to the many bolt action rifles, the Remington Model 760 slide action and 742 semi-auto as well as the Browning High-Power semi-auto include the .30-06 as standard calibers. The Ruger Number One single shot rifle is also offered in .30-06. A number of British and European side by side or over-under double rifles can be ordered in this caliber and so can some European rifle-shotgun combination guns.

General Comments The .30-06 is undoubtedly the most flexible, useful, all-round big game cartridge available to the American hunter. For many years it has been the standard by which all other big game cartridges have been measured. To say that a cartridge is in the .30-06 class means it is suitable for any game in North America. The secret of success when using this cartridge is to be sure and select the right bullet for the game and hunting conditions at hand. The lighter bullets of around 100 to 130 grains, should be used only for varmint hunting. While these bullets can be driven at impressive velocities, starting out at over 3000 fps, they are made to expand rapidly on small animals and will not penetrate properly on large game. For deer, antelope, goat, sheep, black or brown bear, under most hunting conditions, the 150- or 165-gr. bullet is proper. For heavier game, such as elk, moose or the big brown bear, the 180-, 200- or 220-gr. bullet is the best choice. These are also considered best for woods or brush hunting, regardless of the quarry. Many experienced hunters consider the 180-gr. bullet as the most satisfactory all-round loading for the .30-06 because it can be used effectively on anything from deer sized animals on up to the heaviest varieties under almost any hunting conditions. When handloaded with the 250-gr. bullet, the .30-06 practically duplicates the performance of the British .318 Rimless-Nitro, popular in many parts of Africa for shooting plains game. As a matter of fact, the .30-06 will give a good account on all but the heaviest or most dangerous African or Asiatic species under average hunting conditions. The 220-gr. bullet is generally recommended for African game although the 180-gr also has a good reputation there. With the proper bullet, this cartridge can be adapted to any game or hunting situation in North or South America, whether in the mountains, plains, woods or jungle. Few other cartridges can claim equal versatility.

One of the joys and advantages of owning a .30-06 is the availability (at least heretofore) of low-cost surplus military ammunition. This comes in a confusing variety of types and manufacture, and the question often arises as to the meaning of the color coding ued on the bullet tips or which lots have corrosive or non-corrosive primers. To save space and facilitate identification, these data are presented in tabular form for U.S. .30-06 military ammunition only. Other countries, such as Mexico, also adopted the .30-06 as their official military round, but information covering all the foreign varieties is outside the scope of this book.

Table Showing Change from Corrosive to Non-Corrosive Primers for Various Lots and Manufacture of 30-06 Military Ammunition

Source	Headstamp	Year and Lot #		
Dominion*	DAQ	Ball, all n-c		
Frankford	FA	Ball	(6/51)	#4149
		AP	(10/51)	#887
Lake City	LC	Ball	(6/51)	#13700
		AP	(4/51)	#13158
Remington	RA	Ball	(11/51)	#33853
St. Louis	SL	Ball	(5/52)	#9420
		AP	(7/52)	#9467
Twin Cities	TW	Ball	(12/50)	#19362
		AP	(2/52)	#19776
Verdun*	VC	Ball, all n-c		
Western Cartridge Co.	WCC	Ball	(6/51)	#6428
Winchester Repeating Arms	WRA	Ball	(8/51)	#23201
		AP	(6/51)	#22007

*Canadian; all others, U.S.

Note: Practically all U.S. Military ammunition loaded after 1952 has non-corrosive primers. The principal exception is Frankford Arsenal Match ammunition marked "FA 53, 54 or 56" which has the old style corrosive priming. This can be identified by the date and the green, red or purple waterproofing compound around the primer. Military primers marked "FA 26," or "FA 70" are of the chlorate type and corrosive composition.

Principal Caliber .30-06 Military Weapons

U.S. 1903 Springfield series, 1917 Enfield and M1 Garand rifles; 1918 series Browning automatic rifle (BAR); 1917 and 1919 series and M37 machine guns. Late Gatting guns.

Belgian FN M49 rifle and Model D automatic rifle.

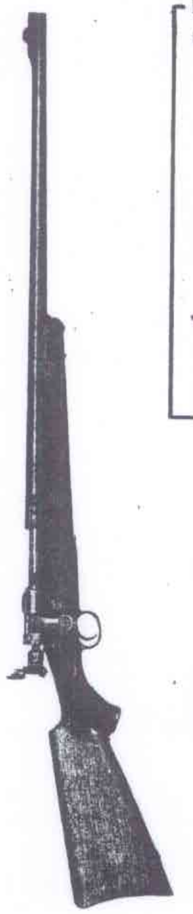
Lewis machine guns.

Mexican M1954 rifle and RM-2 Mendoza light machine gun.

Danish Madsen 1958 rifle (bought by Colombia).

FN (Belgian) rifles made for various South American governments, based on the Mauser '98 pattern bolt action.

Col. Whelen's longtime favorite game rifle was this Fred Adolph-stocked .30-06 Springfield. See Addenda pages for other U.S. military weapons of World War II chambered for this cartridge.



Reloading Data and Factory Ballistics

Bullet (grs.)	Powder/grs.		MV	ME	
93	4198	50	3450	2460	Varmint load
110	4064	56	3300	2660	" "
110	H-380	58	3220	2562	" "
130	3031	53	3210	2998	Medium game
130	H-380	56	3100	2776	" "
150	4350	60	2990	2980	Dup. fact. ball.
150	HV-2	48	2938	2868	Deer, elk, etc.
165	4320	52	2880	3050	" " "
180	4320	50	2700	2910	Dup. fact. ball.
180	4831	61	2710	2940	Elk, moose, bear
200	4320	47	2500	2872	Heavy game
220	HV-2	43	2410	2843	Woods, brush load
250	4831	54	2450	3480	Max.—heavy game
110	FL		3370	2770	200 yd. MRT = 2.2"
**130	FL		3281	3108	" " 1.5"
150	FL		2970	2930	" " 2.5"
180	FL		2700	2910	" " 3.1"
220	FL		2410	2830	" " 3.9"
250	4831	54	2450	3325